REPORT DOCUMENTATION PAGE	Form Approved OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	14.Jan.03	THESIS

4. TITLE AND SUBTITLE
DOES NETWORK NEWS COVERAGE OF LIGISLATION IN CONGRESS SHOW SIGNS OF PARTISAN BIAS?

5. FUNDING NUMBERS

6. AUTHOR(S)
CAPT KNAPP COLIN A

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
UNIVERSITY OF FLORIDA

8. PERFORMING ORGANIZATION REPORT NUMBER
CI02-807

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
THE DEPARTMENT OF THE AIR FORCE
AFIT/CIA, BLDG 125
2950 P STREET
WPAFB OH 45433

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION AVAILABILITY STATEMENT
Unlimited distribution
In Accordance With AFI 35-205/AFIT Sup 1

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

20030220 130

14. SUBJECT TERMS	15. NUMBER OF PAGES
	50
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

Abstract of Thesis Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Master of Arts

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By

Colin Knapp

December 2002

Chair: David Figlio
Department: Economics

Television news plays a large role in shaping the general public's opinion of politics. Therefore, coverage tainted by bias can influence how people think and eventually choose the politicians who represent them. Such a great amount of time has been spent by journalists, politicians and scholars on the subject of media bias, that it is easy to cite sources supporting almost any position. Unfortunately, much of this work has relied on anecdotal evidence and subjective content analysis. Studies using more sophisticated statistical techniques often do not properly specify the empirical models that are eventually chosen. This makes the results of such studies questionable.

This study measures the effect of party affiliation on the amount of news coverage given to legislation voted on in Congress. By recording the amount of coverage on ABC, CBS and NBC, on the days before, on and after a vote is taken in Congress, this effect can be estimated using several fixed effects regression models. Although empirical results showed no consistent signs of bias, they did suggest that, under certain

circumstances, television networks do consider party affiliation when allocating airtime. This is important in showing that television networks are not always objective and viewers need to consider this as they watch the nightly news.

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MASTER OF ARTS

UNIVERSITY OF FLORIDA

2002

The views expressed in this article are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the U. S. Government.

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circumstances, television networks do consider party affiliation when allocating airtime. This is important in showing that television networks are not always objective and viewers need to consider this as they watch the nightly news.

INTRODUCTION

The media play a large part in shaping the general public's opinion of politics. Over time, the way in which they do this has been investigated for signs of favoritism towards one political party. Such a great amount of time has been spent by journalists, politicians and scholars on the subject of media bias, that it is easy to cite sources supporting almost any position. Unfortunately, many of these works rush to make judgments concerning the direction of bias instead of making simpler arguments concerning its existence. This practice has resulted in studies which rely on anecdotal evidence, subjective content analysis and poor model specification. This makes the results questionable and leads to a myriad of conflicting findings.

This study focuses on the more basic question of the existence of media bias. It measures network news coverage of legislation in Congress and looks for differences in the amount of coverage based on political party. Although the empirical results show no consistent signs of bias, they do suggest that, under certain circumstances, television networks do consider party affiliation when allocating airtime. While remaining agnostic towards the tone of coverage limits the ability to make a more "glamorous", conservative versus liberal argument, the use of sound statistical analysis helps correct common flaws in the previously published literature. This is an important first step in showing that the networks are not always objective.

The remainder of the paper is organized as follows. First, the importance of an objective press is presented with a review of the relevant literature. Next, the data is

reviewed in order to determine a proper functional form. The model is then estimated and the empirical results are discussed. Finally, the limitations of this study are reviewed in addition to areas for future research.

LITERATURE REVIEW

Importance of an Objective Media

"The people shall not be deprived or abridged of their right to speak, to write, or to publish their sentiments; and the freedom of the press, as one of the great bulwarks of liberty, shall be inviolable."[1] James Madison's original submission for the Constitution's First Amendment spoke clearly about the media's role in society. The country's founders saw the need for a press, free from government intervention, whose role it would be to keep the public properly informed. The founders knew that no democratic government could justly represent the people if the government were in control of the press. Therefore, protection was required and the First Amendment was born. The idea of a free press has been revisited many times in front of the Supreme Court, and to this day, the press' freedom has endured.

With the protection of the First Amendment, came responsibility. If the press was to be free, then it had a duty to faithfully report on the government from which it was protected. Although not explicitly stated in the First Amendment, Madison had to know that the public would be just as slighted by a press lacking objectivity, as they would be by a press that acts as the mouthpiece of a tyrannical government. A presentation free from government interference, but clouded with editorial bias, would fail to live up to the "great bulwark of liberty" that Madison envisioned.

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[1] Library of Congress, 1998.

Claims of political bias have been leveled against the media since President Eisenhower was in office and continue today, as evidenced by Senator John McCain's accusation that NBC anchor Tom Brokaw is a ". . . left-wing, Communist, pinko."[2] Even journalists cannot resist the temptation to "call out" their own. Long-time CBS correspondent Bernard Goldberg spent nearly 250 pages outlining how liberal tendencies enter the nightly newscasts. With politicians and journalists making so much noise over bias, there is no wonder that Americans believe that journalists are influenced by their personal views.[3]

Starting in the 1970s, academics began to study the issue of bias in the media. Early studies by Epstein (1973), Sigal (1973), Roshcoe (1975), Tuchman (1978) and Gans (1980) found little connection between the personal beliefs and final reporting of journalists. Reeves and Iyengar (1997) went further by explaining that objectivity is correlated to credibility, and without the latter, a journalist's access to important sources disappears.

Even with a body of work outlining the media's objectivity, scholars have still tried to prove the existence of either a conservative or liberal media bias. Rothman and Lichter (1987) used media opposition to conservative agenda items to form a liberal bias argument. Stovall (1988) made claims of a conservative bias after finding that Reagan was given a greater share of the coverage in the 1984 campaign against Mondale.[4]

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[2] Dowd (2000), A21.

[3] Watts et al. (1999) suggested that the media's own coverage of bias increased the public's belief that bias does exist.

[4] This assumes that coverage is either neutral or positive. Studies such as Groeling and Kernell (1998) and Niven (2001) suggest that negative coverage is more prevalent than positive. Therefore, more is not necessarily better and additional coverage cannot be concluded to be a sign of conservative bias.

Kuklinski and Sigelman (1992) studied network news coverage of Senators and found that opponents of Carter and supporters of Reagan were given more airtime. Lichter and Noyes (1995) used survey data to show that journalists are twice as likely to be Democrats than Republicans. For every pro-conservative argument, there has been a pro-liberal study to match. There have even been studies that suggest that both sides of the argument are true at the same time. Vallone et al. (1985) concluded that people on differing sides of an issue, after watching the same coverage, would determine that a bias exists against their respective position.

With so much being discussed in the news and research journals, you have to ask yourself, is the media biased? What you hear, see and read tells you a myriad of things. Although journalists, politicians and scholars do not agree on the existence or direction of partisan bias, one thing is certain. Our system of government requires an informed public. Without an objective press, constituents are left ill informed and cynical about government.[5] To avoid this, the media needs policed much like the press polices government. The use of sound statistical methods can provide a firm foundation for such work and allow a more defendable stance to be taken concerning bias in America's newsrooms.

Shortfalls of Earlier Studies

Many of the studies listed above have two common flaws. First, they rely on a process called content analysis. This is a procedure used to review, and then score, news coverage as conservative, liberal or neutral.[6] Groeling and Kernell (1998) suggested that this process was too arbitrary to distinguish between good and bad news. This process

[5] See Cappella and Jamieson (1996) and Pinkleton et al. (1998).
[6] This is just one possible coding scheme. Another common example defines coverage as positive, negative or neutral in tone.

uses human coders to derive the score and this adds some amount of subjectivity to the data. This compromises any subsequent results. Patterson and Donsbach (1996) pointed out that content analysis cannot distinguish between favoritism in the media and the true nature of newsworthiness. Put together, these studies suggest that models of media bias should avoid content analysis if possible. This helps ensure that results are reached objectively.

The second flaw of the early media bias literature is its failure to use robust statistical techniques. For instance, a 1984 study published in *Broadcasting* used simple count methods to pronounce that there was no proof of media bias in the use of politically charged language. Lowry and Shidler (1995) reviewed the 1992 presidential campaign coverage and drew conclusions about bias from simple averages. In both studies, no attempt was made to determine whether differences in the results for both parties were statistically significant. Although discussion of such statistics is desirable in analytical work, making judgments solely on these figures is not good practice.[7] The results of such studies could be as much about media bias, as they are about who was President or which party controlled Congress.

Improvements in Media Bias Analysis

Several studies have pushed the frontier of media bias research by using better techniques and more sophisticated econometrics in building reasonable models. Tidmarch and Pitney (1985) noted that changes in administrations, shifts in agendas and recurring elections make the quality of analysis a factor of when the measurements are taken. This calls for a broad rather than narrow focus when choosing a topic. It also

[7] The level of sophistication seems to be correlated with the field of the author. Most media bias studies are split between scholars in Communications and Political Science. The Political Scientists seem to use more elaborate econometrics.

signals the need for properly implemented controls that help account for the variation in the data over time.

Kuklinski and Sigelman (1992) did this by using a weighted least squares (WLS) time series model to analyze the pattern of network news coverage on U.S. Senators. They chose WLS based on its ability to correct the influences that highly skewed data can have on results. Although they set a standard by using regression analysis, they failed to see if the results were robust to model specification. They assumed that their data required the variance corrections which are a part of the WLS process. This may not have been necessary if they had tested other models. As will become apparent later, this procedure may not produce the most accurate results.

Sellars (2000) used a logit model to measure the differences in the probabilities of Democrats and Republicans receiving mention in two Washington D.C. newspapers. He chose coverage around the specific issue of the Supplemental Appropriations that were being debated in Congress in May 1997. Two weaknesses are apparent in his analysis. First, Sellars provided little justification for splitting the data between parties when pooling may have been more econometrically sound. Once he divided the analysis by party, he should have tested the significance of the differences in his coefficients. He failed to do this. Without this step, a strong conclusion on the effects of party affiliation cannot be made. Secondly, his focus on one issue limits the applicability of the results. His finding that Republicans were given more coverage may not hold if the same analysis were completed using a different issue.

Niven (1999 and 2001) used the same narrow selection technique in choosing to analyze media coverage of politicians in relation to unemployment statistics. He chose

data points based on the equality of unemployment rates across administrations. He assumed that any differences in coverage are then based on bias and not differences in the performance of separate politicians. Results of the multivariate regression analysis showed that political party had little effect in either study. Unfortunately, there is little way to tell if these results apply outside the consideration of unemployment.

The studies listed above have a final common flaw. None looked solely at the existence of partisan bias without trying to determine if the bias was conservative or liberal. Admittedly, a conclusion suggesting the existence of a conservative or liberal bias is more exciting than simply stating that a bias may exist. Ultimately, it is a question that deserves to be answered. However, it should be answered only after sufficient evidence suggests that bias, regardless of its direction, actually does exist. Therefore, a gap in the literature needs to be closed by studies which focus only on the existence issue.

THE MODEL

Properties of an Adequate Model

The discussion thus far has centered around the various methods and results found in media bias research. Over time, research has become more sophisticated, but still appears to be lacking proper model specification. Fortunately, each piece of research has helped lay a foundation for future studies. Based on this previous research, the necessary elements for a testable media bias model are:

- Analysis should start by determining if partisan bias exists in the data. Only then can research be conducted to determine the direction of such biases.
- Content analysis should be avoided due to its subjective nature. Although this may limit the model's ability to predict the direction of bias, it should in no way preclude the determination of its existence.
- Summary statistics and distribution analysis should be used as criteria for model specification, not as evidence of partisan bias.
- The results should be robust to model specification.
- Baselines should be used to ensure that differences are based on bias and not performance. Additionally, they should not be issue specific.

Data Collection Methods

To empirically test such a model, applicable data are needed. Fortunately, the amount of network news coverage on legislation in Congress for the years 1981 to 1988 and 1993 to 2000 meets these requirements.[8] The collected data will be summarized in a

[8]It may seem odd to use a discontinuous time period. If data from Bush's presidency (1989-1992) had been included, it is possible that some unintended bias could enter the data as a result of Bush only serving for one term. By using Reagan compared to

way that aids model specification and tested in several others that add to the robustness of the model. By choosing the act of voting in Congress as the baseline, and by not focusing on one type of legislation or issue, any significant results will generalize the "pattern" of news coverage in the spirit of Niven and Sellars. Finally, choosing this type of data will limit discussion to the issue of existence and not allow this study to stray into arguing for or against one type of bias.

Data points were selected from the Key Votes section of the *Congressional Quarterly Almanac* for each respective year.[9] The only criterion used to determine eligibility in the sample was that each vote had to list the sponsor of the legislation, their party affiliation and whether the president took a position on the issue. No requirement was placed on the type of legislation that could be included. Therefore, issues ranging from social security to foreign aid made the list of 133 total votes. For each vote, the party of the sponsor, the president's position, the outcome, the chamber where the vote took place and the majority party for that chamber were recorded.

Next, the Television News Database at Vanderbilt University was queried to determine the amount of news aired by ABC, CBS and NBC during their evening

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Clinton, no differences can be attributed to the number of years each president held office.

[9] Congressional Quarterly's editorial board selects votes which it believes are the most influential. Issues are selected, "to the extent a vote represents a matter of major controversy, a matter of presidential or political power, or a decision of potentially great impact on the nation and lives of Americans. If there are a group of related votes on an issue, one key vote is chosen. This is the vote, that in the opinions of Congressional Quarterly editors, was important in determining the outcome." (CQ Almanac, 1981-2000). Although Congressional Quarterly is a media outlet and therefore susceptible to bias as well, it is assumed that any editorial selection bias is placed uniformly across all observations in this study.

broadcasts on the day before, the day of, and the day after each vote in Congress.[10] This method was used in order to capture events which were newsworthy for more than one cycle of broadcasts. Only those stories which mentioned passage, failure or debate on the issue in Congress were used. On several occasions, the networks aired stories related to the issues without mentioning the legislation facing Congress. These instances were not included. This decision was made by assuming that politicians sponsor legislation for personal motives such as name recognition and reelection.[11] By covering an issue without mentioning the legislation, a media outlet eliminates any free ride a politician may receive. In this study, only broadcasts where a politician has the chance to get free press are included. This resulted in the review of 1,197 individual broadcasts.[12] Data collected for each newscast included the amount of time devoted to the issue and whether any significant news events were reported.

Definition of Variables

Summary statistics for the data are listed in Table 1. In addition to the overall statistics shown in column one, the data are broken out by party of the submitter in columns two and three and by president in columns four and five. Similar statistics are reported after eliminating all observations with no coverage. Column six shows the overall statistics, while seven through ten follow the same breakout mentioned previously. This portion of the table should be referred to cautiously. Deleting observations where coverage is zero truncates the sample. While some legislation

[10] Although CNN is covered in Vanderbilt's database, the network was not operational at the beginning of the study period. Documentation in the database for CNN after its start-up is also less consistent than the three major broadcast networks. Therefore, CNN is not included in this study.

[11] See Loomis (1988) and Sinclair (1989).

[12] 1,197 observations are achieved through the following calculation: 3 Networks * 3 Days * 133 Votes = 1,197 broadcasts.

legitimately deserves no coverage, there may also be newsworthy votes which receive no coverage due to partisan bias. It is important not to eliminate the latter votes from the sample. This portion of the table is presented only to provide a relative measure of the length of each story across time and party.

MINUTES is measured in minutes and acts as a dependent variable. Average coverage is measured at 30.5 seconds for all observations and 2:06 assuming that there was coverage. The minimum value assuming coverage was 10 seconds while the maximum for any broadcast was nine minutes. There is a difference in the average amount of coverage given to sponsors of opposing parties. Democrats received an average of 26.8 seconds of coverage while Republicans received almost eight seconds more. Between the two presidencies, votes from the Reagan Administration received more coverage than those from Clinton's.[13] Previous media bias research would use these meager findings as evidence of partisan bias. Doing so is premature. For now, it is enough to say that, all else equal, objective coverage should result in equal time across parties.

ANYNEWS is a dummy variable that measures whether a vote received any coverage during a specific broadcast and is used as an alternate dependent variable in some specifications. It is derived from MINUTES in such a way that it equals zero when there was no coverage and one when MINUTES is greater than zero. In the votes selected for this study, 24.4% received some coverage. Democratic issues received a slightly lesser percentage of the coverage than their republican cohorts. Again, no attempt will be made to use this finding as a statement of media bias.

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[13] Hallin (1992) and Lowry and Shidler (1995) have found that the average length of the sound bite has decreased over time.

HOUSE is the first independent variable and is defined as a dummy representing the chamber where the vote took place. It is set at zero for all Senate votes and one for those in the House of Representatives (HOR). Fifty-six percent of the votes in the sample occurred in the HOR. The coefficient for HOUSE in this analysis should be negative, if significant at all. This would signify that a vote from the HOR would receive less coverage, or be less likely to receive coverage, depending on the specification of the model. All else equal, one vote in the Senate is more significant than in the HOR because the Senate votes fewer times, has fewer members and has more stature.

SIGNEWSEVENT is a dummy variable which equals one when news coverage is dominated by major events of such a shocking or historically important nature that they preclude or severely limit the sharing of the media spotlight. Events were deemed significant if the received more than three mentions per broadcast on all three networks. Representative events include assassination attempts of political figures, airline accidents, hijackings and natural disasters. These types of events appeared in 18.7% of the broadcasts and should have a negative effect on total amount of coverage.

PASSED measures the success of the legislation. It equals one if the motion passed and zero if it failed. No ties occur in the sample.[14] News coverage was much more likely when the legislation passed than when it failed. Nearly 64% of the 133 votes were passed. Seventy-six percent of the broadcasts that contained some amount of coverage were on items which had passed.

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[14] Ties only occurred in the Senate and were treated in two ways. They were coded as a pass if the vice president voted for the legislation or they were coded as a fail if the president was in opposition and the vice president took no action.

PRESYEA is a dummy variable which records whether the president was in favor of the legislation. Support results in a value of one, while opposition is recorded with a zero. Fifty-two percent of the votes had presidential support. Sixty-two percent of those receiving coverage had the okay of the president. There is a large difference in the means when divided by political party. This is a result of there being 47 more votes in the Reagan years than in the Clinton years. At this point, no prediction is being made on the effect of this variable.

SUBMITDEM records the party of the submitter with a one for Democrats and zero for Republicans.[15] In the overall sample, each party put forth 50% of the legislation. Democrats put forth slightly less during Reagan's administration and slightly more during Clinton's which is to be expected. When only those broadcasts with coverage are summarized, only 48% of the stories concern democratic legislation and the differences in sponsorship rates for each administration become more pronounced. It is important not to make conclusions based on these phenomenon alone. However, it can be assumed that if partisan media bias does exist, SUBMITDEM should be one of the most significant variables in terms of magnitude and significance.

DEMMAJ signifies which party held the majority of the seats in each chamber. A democratic majority is recorded with a one and a republican majority with a zero. Democrats held a majority during nearly 57% of the reviewed broadcasts. Party politics and agenda setting can be seen when the sample is broken out by party. Although no

[15] In all cases the submitter was either a Democrat or Republican. Although Independents and Libertarians did hold seats in Congress, none put forth legislation included in this study.

objective statement can be made about the eventual sign of this variable, if partisan bias exists, DEMMAJ should be statistically significant.

PRESDEM simply accounts for which administration held office when the vote occurred. A one signifies Clinton while a zero does the same for Reagan. The mean of 32% is also a result of the unequal number of observations for each president in the sample. This variable and DEMMAJ were collected in order to help control for the power that the party and the president have in setting the legislative agenda. Like the other party related variables, PRESDEM should be statistically significant in the presence of partisan bias. At this point, no prediction can be made concerning its eventual sign.

CONGRESSTERM is a categorical variable defining each session of Congress. There were a total of eight congressional terms during the period of this study. It is also assumed that any changes to the way in which news is broadcast are accounted for by this variable. Over the 18 years contained in this study, it is conceivable that changes in anchors, network ownership, and editorial objectives could have a dramatic effect on the amount of news given to specific issues. However, the likelihood that such changes have as large an effect during a two year time period is much lower. Therefore, these changes can also be controlled for by using CONGRESSTERM.

NETWORK is a categorical variable defining ABC, CBS and NBC.

PROXDATE is a categorical variable defining where in the news cycle a broadcast took place. It equals negative one on the day before, zero on the day of and one on the day after a vote was taken.

Distribution Analysis

The first step in defining the appropriate specification is to determine at what levels the data can be aggregated. Pooling as much of the data as possible is desirable in order

to use the greatest amount of variation available in the model. However, doing so improperly can lead to erroneous results. Previous media bias studies have inexplicably divided the analysis by political party without justifying the need to do so. The following process improves on those studies because it justifies the aggregation levels used during analysis.

Kruskal-Wallis (KW) tests were completed in order to check whether the sub-samples defined by each variable are representative of the same population.[16] The null hypothesis is that all sub-samples are from the same population. F-tests were calculated by interacting each variable with a party dummy variable and then running an ordinary least squares (OLS) regression with MINUTES as the dependent variable. The coefficients for each democratic and republican interaction variable were then tested against each other for equality. Tests were completed individually and jointly. The individual null hypotheses are that the respective coefficients for Democrats and Republicans are equal. The null hypothesis for the joint test is that all the coefficients are equal at the same time. Results are shown in Table 2.

The KW statistic exceeded the critical value for the 99% significance level for SIGNEWSEVENT, PASSED, PRESYEA, CONGRESSTERM and PROXDATE. This suggests that each sub-sample within these six variables comes from a different distribution. Put another way, the networks can be expected to allocate air time differently when there is a significant news event compared to when there is not. The same holds for when legislation passes and the president supports an issue.

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[16] The resulting statistic is distributed as a Chi^2 with (k-1) degrees of freedom where k equals the number of sub-samples.

The statistic for CONGRESSTERM suggests that there is a structural difference in the coverage from one session of Congress to the next. This makes sense because the agendas, demographics and issues facing Congress vary with each term. The significance of PROXDATE is also explainable. Newsworthiness should decrease the further away in time broadcasts are from the events they are covering. Therefore, the news coverage for each day of the news cycle should be different. These two variables represent important sources of variation that will need to be controlled for in the final design of the model.

The F-test of the joint hypothesis results in a value of 4.5~F(8, 1,180). This is significant at the 99% level. This means that the coefficients with respect to each party are statistically different. However, this result cannot definitively prove a claim of media bias. Many factors, other than partisan bias, could be accounting for the difference.

The individual F-statistics are similar to the KW statistics.[17] The values for CONGRESSTERM and PROXDATE are significant at the 95% level. This helps confirm that there appears to be a structural difference in these two variables. PASSED and PRESYEA are also statistically different between parties. In this test, the effect HOUSE has on the number of minutes of news coverage is also different between parties.

Based on these two tests, it appears that CONGRESSTERM and PROXDATE effect the distribution of minutes. This would justify splitting the data along each sub-sample. Eight congressional terms crossed with three days in the news cycle would leave 24 separate regressions that would need to be performed. Although computationally easy to accomplish on a computer, the results would be difficult to interpret. Fortunately,

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[17] Individual statistics for SUBMITDEM and NETWORK cannot be empirically calculated. SUBMITDEM cannot because the interaction term is identical to the interaction variable. NETWORK cannot because it does not take on a numeric value.

running a fixed effects model with a component for CONGRESSTERM and another for PROXDATE will control for the variation caused by these two variables and make it unnecessary to run another 23 regressions.

The statistical significance of SIGNEWSEVENT, PASSED, and PRESYEA are also important to the model's specification. However, the variation they add to the model does not come from the structural make-up of a session of congress or network news selection process. Their variation is not predetermined prior to each vote. For example, the occurrence of a significant news event is random from vote to vote. The same holds for whether votes pass or gain the president's support. Therefore, their effects can be included in the model simply as variables.

The KW and F-Tests show several more important results. The statistical insignificance of SUBMITDEM in the KW Test indicates that running separate regressions for each party is not appropriate.[18] This suggests that a common practice in the bias literature is uncalled for in this case and the data can be pooled, which allows a greater amount of the variation to be utilized. The significant results of the individual and joint F-Tests support regressing SUBMITDEM not only as a separate variable in the model, but also while interacting it with HOUSE, PASSED, PRESYEA and PRESDEM. Finally, the insignificance of NETWORK suggests that ABC, CBS and NBC treat legislation in Congress similarly. Therefore, the data from the three networks will be pooled and no more tests will be completed delineating between them.

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[18] Early bias research might also mistakenly interpret this as evidence of journalistic objectivity.

The Functional Form

Based on the KW and F tests, the functional form is:

$$MINUTES = CONSTANT + \beta_1 HOUSE + \beta_2 SIGNEWSEVENT + \beta_3 PASSED + \beta_4 PRESYEA + \beta_5 SUBMITDEM + \beta_6 DEMMAJ + \beta_7 PRESDEM + \beta_8 SUBMITDEM*HOUSE + \beta_9 SUBMITDEM*PASSED + \beta_{10} SUBMITDEM*PRESYEA + \beta_{11} SUBMITDEM*PRESDEM + \beta_{12\text{-}20} FE\_DUMMIES.$$

The variable of interest is SUBMITDEM and interaction terms have been included as suggested earlier. The last term represents a matrix of nine dummy variables. Seven account for the fixed effects by congressional term and two control for the different days of the news cycle. In each case, the dummy variable for the first time period has been dropped to allow the regressions to be expressed with a constant term.

Two Models of the Television News Broadcast

Although a sound functional form has been developed, the type of model to be used has yet to be determined. To do that, all areas where partisan bias can enter a broadcast must be considered. The most obvious place for bias to enter is in the way material is covered. The avoidance of content analysis in this study eliminates that as a possibility. This leaves the decision making processes, which determine if a story will be covered and how much time will be given to those stories that are aired, as the remaining possible sources of bias.

These two decisions can be tested together or separately. When tested together, the continuous dependent variable MINUTES is used. Since zero values can result from a vote being unworthy of airtime or from bias, the results may be skewed due to the inclusion of a large number of zeroes which do not belong in the sample. In the second method, two tests are completed. In the first test, the dichotomous dependent variable ANYNEWS is used in order to measure bias by looking at the likelihood of coverage between political parties. The next step estimates the amount of coverage conditional on

the vote being covered on the air. The results obtained from this step may be biased due to the truncation of the data. Ultimately, neither method is perfect, but corrections can be made which allow the results from both methods to be used in determining the true effects of party affiliation on news coverage.

Table 1. Summary statistics

	All observations									
	(1)		(2)		(3)		(4)		(5)	
	Overall (N=1,197)		Democrat (N=594)		Republican (N=603)		Reagan (N=810)		Clinton (N=387)	
Variable	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev
MINUTES	0.509	1.191	0.447	1.053	0.572	1.311	0.528	1.218	0.471	1.132
ANYNEWS	0.244	0.429	0.237	0.426	0.250	0.433	0.241	0.429	0.256	0.405
HOUSE	0.556	0.497	0.576	0.495	0.537	0.499	0.555	0.497	0.558	0.497
SIGNEVSEVENT	0.187	0.390	0.165	0.371	0.208	0.406	0.167	0.372	0.229	0.421
PASSED	0.539	0.481	0.591	0.492	0.586	0.464	0.577	0.468	0.558	0.497
PRESYEA	0.519	0.499	0.394	0.489	0.641	0.479	0.555	0.497	0.442	0.497
SUBMITDEM	0.496	0.501	--	--	--	--	0.488	0.501	0.511	0.501
DEMMAJ	0.571	0.495	0.712	0.453	0.432	0.496	0.533	0.482	0.441	0.497
PRESDEM	0.383	0.468	0.383	0.472	0.313	0.464	--	--	--	--

	Assuming coverage (MINUTES > 0)									
	(6)		(7)		(8)		(9)		(10)	
	Overall (N=592)		Democrat (N=341)		Republican (N=151)		Reagan (N=312)		Clinton (N=80)	
Variable	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev
MINUTES	2.081	1.586	1.881	1.405	2.285	1.721	2.021	1.532	2.274	1.452
ANYNEWS	--	--	--	--	--	--	--	--	--	--
HOUSE	0.500	0.501	0.454	0.499	0.543	0.499	0.518	0.501	0.450	0.501
SIGNEVSEVENT	0.109	0.313	0.092	0.290	0.125	0.333	0.108	0.312	0.112	0.317
PASSED	0.761	0.428	0.895	0.462	0.821	0.384	0.787	0.409	0.887	0.465
PRESYEA	0.816	0.487	0.454	0.499	0.768	0.423	0.841	0.481	0.550	0.501
SUBMITDEM	0.483	0.501	--	--	--	--	0.467	0.500	0.585	0.503
DEMMAJ	0.558	0.497	0.845	0.481	0.476	0.501	0.594	0.492	0.462	0.502
PRESDEM	0.374	0.448	0.397	0.453	0.351	0.435	--	--	--	--

Table 2. Kruskal Wallis and F-Test results

Variable	Kruskal-Wallis statistic	*P*-value	F-statistic	*P*-value
HOUSE	1.824	0.177	6.69***	0.001
SIGNEWSEVENT	8.163***	0.004	0.82	0.366
PASSED	17.410***	0.001	3.94**	0.047
PRESYEA	10.033***	0.002	8.63***	0.003
SUBMITDEM	0.366	0.545	--	--
DEMMAJ	0.024	0.875	0.06	0.803
PRESDEM	1.708	0.191	26.56***	0.000
NETWORK	0.078	0.961	--	--
PRESTERM	4.556	0.207	0.00	0.956
CONGRESSTERM	21.517***	0.003	5.68**	0.017
PROXDATE	36.361***	0.001	5.34**	0.021

** Significant at the 95% level

*** Significant at the 99% level

EMPIRICAL RESULTS

The Single-Step Process

The single step process was modeled by OLS with fixed effects. Since the inclusion of so many zeroes may skew the results and the literature recommends using WLS, this test was also completed. Results for both are listed in Table 3.

Before determining the effects that partisan bias may have on the coverage of legislation in Congress, special attention needs to be paid to acute differences in each specification. Although the WLS model is significant at the 99% level, there are several inconsistencies. First, SIGNEWSEVENT is insignificant and has the incorrect sign. If this variable were significant, it would suggest that important news events would promote coverage of congressional legislation rather than preempt it. The magnitude and sign of the dummy variable representing the day after a vote occurs is also alarming.[19] It is significant at the 99% level and has a greater effect on coverage than the coefficient for news on the day a vote actually takes place. This means that newsworthiness increases with time! Finally, SUBMITDEM is statistically insignificant. Therefore, any analysis of partisan bias based on this model would be questionable.

It is very important to note that the statistical insignificance of SUBMITDEM in the WLS model does not rule out the possibility of partisan bias. In fact, little importance

[19] The effect for this variable is determined by adding the constant and the coefficient together. This results in a positive coefficient of 0.323. Doing this is required because the coefficient in Table 4 is currently represented in terms relative to the omitted dummy variable.

should be placed on this result because this model is so inappropriate for this data. The process by which WLS calculates its coefficients uses improper transformations of the data. Earlier, it was noted that pooling the data was statistically appropriate across certain groups of variables. The WLS calculation ignores these facts and calculates separate means for all sub-groups within the dependent variable. These means are then substituted for the original observations in the dependent variable before least squares estimates are calculated.[20] This explains the lower number of observations. Based on this discovery, the WLS specification will no longer be discussed.

The least squares with fixed effects specification performs well. Its overall statistical significance level is over 99% and the majority of the variables are statistically significant at the 95% level. The variable of interest, SUBMITDEM, is significant, as are the interaction terms. SIGNEWSEVENT is significant and negative. This shows that the occurrence of a significant news event decreases coverage. Additionally, the dummy variable representing broadcasts on the day a vote has taken place (PROXDATE = 0) is significant and has the proper sign relative to the other days in the news cycle. This supports the idea that news of an event should be the most newsworthy on the day it occurs. The results show that the inclusion of PRESDEM has an effect similar to a fixed effect term and requires that another variable be dropped. This explains the lack of a coefficient for the fifth congressional term.

There is another interesting result. Legislation from the first congressional term of Reagan's administration received significantly greater amounts of coverage compared to the final three. Research seems to indicate that this first congressional term is an outlier.

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[20] Stata Users' Manual (1999).

Kuklinski and Sigelman (1992) and *Congressional Quarterly Almanac* (1981) discussed how the near landslide victory by Reagan, and the Republican take over of the Senate, led to conservative news being all that was available. Therefore, a lack of liberal issues in the news was not a result of bias in the media. The setting of a republican agenda was a legitimately newsworthy event. This phenomenon waned by the second congressional term and the differences in congressional coverage during Clinton's administration are statistically insignificant. This fact, which is inexplicable within this data set, provides another justification for using a congressional term fixed effect.

Unfortunately, determining the existence of a partisan bias is not as easy as just looking at the coefficient for SUBMITDEM. Making that mistake would lead to the inappropriate conclusion that Democrats receive significantly more coverage. The difference would give Democrats 48 more seconds of airtime than their Republican counterparts.[21] This calculation leaves out the effects of the interaction terms which also play a significant part in determining the total amount of coverage. Therefore, the proper calculation for determining the difference in time allocated to Democrats and Republicans is:

$$\partial MINUTES/\partial SUBMITDEM = 0.805 - 0.355HOUSE - 0.298PASSED - 0.480PRESYEA - 0.430PRESDEM.$$

By varying the values of the dummy variables in this equation, 16 outcomes can be calculated. These outcomes are listed in Table 4.

To see a simple example, look at the first case in Table 4. In this instance, all the dummy variables equal one. This represents a Democrat from the HOR sponsoring legislation which a democratic President supports along with the legislation passing.

[21] Coefficients in Table 3 are in minutes. Therefore, the calculation is. 0.805 * 60 = 48 seconds.

Such a Representative will receive 45 fewer seconds of coverage solely because he is a Democrat. This outcome is very different from the one gained by simply looking at the coefficient for SUBMITDEM. By continuing this process, the other 15 results can also be calculated.

The most interesting finding can be seen by examining the polar opposite situations, Cases 1 and 16. It is apparent that the effect of a submitter's political party on the amount of coverage received is not constant or always of the same sign. In some cases, a Republican is likely to receive more coverage, while in others the same is true for a Democrat. If the goal of this study was to determine the direction of partisan bias, a conclusive statement would be impossible to make. Fortunately, that is not the goal and the only conclusion that can be made is that party affiliation does affect coverage some of the time. This suggests that the networks are not always objective in their handling of the two major parties.

The final case on Table 4 calculates the effect in the average situation occurring in this data set. By using the means for each variable, the calculated effect is that a democratic sponsored piece of legislation will receive 22 fewer seconds of coverage than a republican sponsored bill. This is significant at the 92% level. Because such a wide variety of factors have been controlled for, it can be suggested that, on average, the networks will give republican legislation more airtime. However, this does not suggest a conservative bias because no account has been made for the tone of coverage.

There are several other observations that can be made concerning the outcomes listed in Table 4. By pairing the correct combinations of cases, the effects of such things as the chamber of Congress where the vote originated and presidential support can be

determined. For instance, Cases 1 and 2 can be compared to show the effect of a Democrat being from the HOR or the Senate, *ceteras peribus*. In this situation, the Senator receives 21 seconds more coverage than the Representative. Continuing through the table shows that in all eight possible pairs, the Senate always receives more coverage. This supports the assumption that the Senate would receive more coverage.[22] Similarly, legislation that passes receives more coverage than that which fails.

Presidential support comparisons yield a more interesting result. During the Reagan administration, a Democrat receiving the president's support, always received more coverage than if the president opposed the legislation. This phenomenon reverses itself during the Clinton administration. In these cases, a Democrat is going to receive less coverage with presidential support than without. By pairing similar cases by administration (i.e., Case 1 to Case 8), it can be seen that the networks prefer stories concerning bipartisan action between the executive and legislative branches. This also suggests that the status quo of party-line support is less newsworthy than cross-party alliances.

The Two-Step Process

The first part of this process involves testing a limited dependent variable model. With no assumption being made towards the distribution of the error terms, it is appropriate to run both linear and non-linear models. In these specifications, ANYNEWS is used as the dependent variable. This allows linear probability, probit and logit specifications to be completed. The results are listed in Table 5.

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[22] Although it would be desirable to calculate a time differential based on all the matched cases, the statistical insignificance of some of the overall effects would make such a figure unreliable. Therefore, it is better to look solely at the trends in the data.

The first comparison should be made between the probit and logit outcomes. Each model is significant at the 99% level. The signs and significance levels are similar for all the independent variables. This suggests that there is no harm in assuming that the error term is normally distributed. This allows the linear probability model to be compared to the probit since they share the same normality assumption for the error terms. In order to compare the coefficients more easily, the outcomes listed in Table 5 for the probit model are listed in d*F*/dX format. These two models produce similar results with the coefficients being of similar magnitude and significance levels across the board. With the linear probability and probit models producing similar results, it can be assumed that the functional form is invariant to model specification. For ease of interpretation, the linear probability model can be used during the rest of the analysis.

The results from the linear probability model can be analyzed in the same fashion as the OLS with fixed effects model in the one step process. SIGNEWSEVENT is highly significant and the occurrence of one reduces coverage by nearly 15%. The relationship of CONGRESSTERM and PROXDATE is the same as before and suggests that the model is measuring the correct effects. In order to measure the effect of party affiliation on the likelihood of being covered, a matrix is created to capture the effects of the interaction terms. These results are listed in Table 6.

Although not as statistically significant as the results from the previous section, this model paints a similar picture. Party affiliation continues to have a significant, although inconsistent, effect at the extremes with bipartisanship being more likely to get coverage

than partisanship. The Senate is more likely to get coverage than the HOR and passing votes will get more coverage than those that fail.[23]

The next step in the process is to calculate the effect of party affiliation conditional on there being some coverage of the vote on the nightly news. To do this, all values where MINUTES equals zero were dropped from the sample. The same linear fixed effects model used in the one step process was then calculated on the remaining 292 observations. Since some of the zeroes may be as a result of bias and not a lack of newsworthiness, it is also necessary to account for the truncation of the data at the lower end of the distribution. A tobit model was calculated to account for these effects. The results are listed in Table 7.

Both specifications are significant at the 99% level. The two tell-tale variables, SIGNEWEVENT and PROXDATE, have vastly different results compared to the those in the previous tests. In this case, SIGNEWSEVENT is statistically insignificant. This would be expected since the majority of the significant news events were eliminated by dropping all the zero valued observations. The same holds for PROXDATE as the majority of the zeroes were on the day before or the day after the vote. For the remaining variables, the magnitude of the coefficients increases from the deletion of all zeroes. The signs of the coefficients are equal to those in Table 3 which suggests that the processes are measuring the same phenomenon.

The effect of party affiliation on each model is listed in Table 8. The results are similar in nature to those listed in Tables 4 and 6. There is no consistent bias, but the television networks do appear to take party affiliation into account at some times. On

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[23] Although not listed, a matrix was completed for the probit results. The magnitudes and significance levels were similar.

average, it appears that party affiliation is not a deciding factor in determining the amount of time given to individual votes. However, at the extremes, there is nearly a two and a half minute difference based on the party of the submitter. This great a difference could have an effect on public opinion. More importantly, if networks provide legislators free press in such an unequal way, it might effect a politcian's decision to sponsor legislation. If a congressman knows he'll get less coverage because of his party affiliation, then he may be reluctant to sponsor the legislation at all.

Interestingly, the OLS and tobit models have nearly similar results with the greatest difference between the two being 12 seconds. This, combined with the fact that the smallest amount of coverage given to any one vote is 10 seconds, suggests that the models are measuring essentially the same things and very little truncation must be taking place when the zero valued observations are dropped from the sample. This further suggests that most zero values are a reflection of a vote's newsworthiness and not a sign of bias.

Limitations and Areas for Further Study

Like other media bias studies, this paper has limitations. Since a large portion of the emphasis was placed on designing the model, any shortcomings should not be a result of poor specification or subjective assumptions. However, several areas could be improved if there were additional time to do so.

First, the selection method of the votes is slightly flawed. The editors of *Congressional Quarterly Almanac* list only one vote in their Key Votes section even though several may have taken place on the same issue over the span of a couple of days. There is no way to be sure that the congressional news coverage collected from the Vanderbilt database is for the key vote or another vote occurring in close proximity. To

correct this and make the data more reliable, votes from outside the Key Votes section should be included.

Although two presidential administrations were used in order to try to capture the effects that differing parties had on coverage, the extent to which general conservative versus liberal arguments can be made is limited. There is currently no way to verify that Reagan is representative of all republican presidents, nor Clinton of all Democrats. Broadcasts are available dating back to 1968. These should be added in order to better frame the effects the presidency has on congressional news. Similarly, this study only focuses on network news coverage. The dataset would have to be expanded to other types of media in order to make generalizations about the entire journalism profession.

Finally, the current dataset does not control for the fact that some members of Congress are more newsworthy than others. Kuklinski and Sigelman (1992) showed that Senators who have made an attempt at running for president and those holding Senate leadership positions were more likely to be used as news sources by the networks. This can be controlled for by using a dummy variable to code for this information.

The most difficult obstacle to overcome is the inability to objectively determine causality. Assume for a moment, that the results from Tables 4, 6 and 8 consistently favored one party over the other. For example, a Republican always receives more coverage than a Democrat regardless of the political landscape. Although evidence of a partisan bias will have been shown, determining the direction of that bias is nearly impossible. To do so, an assumption about the content must be made. If the tone of coverage is positive or neutral, then there is conservative bias. However, if the assumption is that the news has a negative tone, then the Republican is being hurt by

receiving more coverage. In order to make this type of assumption, some sort of content analysis must be used and that reduces the amount of certainty with which conclusions can be made.[24]

[24] Asserting a claim concerning the tone of coverage is problematic because research in this area is inconclusive. Groeling and Kernell (1998) provided evidence from the Center for Media and Public Affairs showing that Presidents Bush and Clinton averaged more favorable news than unfavorable in only three of 24 quarters. This can be offset by Hofstetter (1976). His use of content analysis showed that coverage was mostly neutral in nature.

Table 3. Regression results for the one-step process

Variable	OLS	WLS
CONSTANT	0.334**	0.072
HOUSE	0.113	-0.507***
	(0.134)	(0.138)
SIGNEWSEVENT	-0.276***	0.014
	(0.087)	(0.067)
PASSED	0.635***	0.098
	(0.122)	(0.091)
PRESYEA	0.538***	0.244***
	(0.127)	(0.052)
SUBMITDEM	0.805***	0.125
	(0.177)	(0.099)
DEMMAJ	0.349***	0.304**
	(0.142)	(0.127)
PRESDEM	-0.093	0.072
	0.181	(0.134)
SUBMITDEM * HOUSE	-0.355**	0.335***
	(0.142)	(0.086)
SUBMITDEM * PASSED	-0.298*	0.224*
	(0.163)	(0.124)
SUBMITDEM * PRESYEA	-0.480***	-0.307***
	(0.168)	(0.083)
SUBMITDEM * PRESDEM	-0.430**	-0.210
	(0.178)	(0.129)
CONGRESSTERM 2	-0.679***	-0.336***
	(0.108)	(0.049)
CONGRESSTERM 3	-0.405***	-0.174**
	(0.117)	(0.074)
CONGRESSTERM 4	-0.761***	-0.565***
	(0.137)	(0.133)
CONGRESSTERM 5	--	--
	--	--
CONGRESSTERM 6	0.203	0.108
	(0.225)	(0.193)
CONGRESSTERM 7	0.288	0.266
	(0.243)	(0.236)
CONGRESSTERM 8	0.123	0.081
	(0.214)	(0.179)
PROXDATE = 0	0.492***	0.220***
	(0.079)	(0.049)
PROXDATE = 1	0.088	0.251***
	(0.079)	(0.071)
No. of observations	1197	673
F-Statistic/*Chi*^{2}	*188.43***	*140.95***
Adjusted R^2	0.1380	--

* Significant at 90% level

** Significant at 95% level

*** Significant at 99% level

Table 4. Effects of party affiliation for the one-step process

Case	PRESDEM	PASSED	PRESYEA	HOUSE	Difference	Std. error	# of occurrences[a]
1	Yes	Yes	Yes	Yes	-0.758***	0.187	4/4
2	Yes	Yes	Yes	No	-0.403**	0.187	7/1
3	Yes	Yes	No	Yes	-0.278	0.191	1/3
4	Yes	Yes	No	No	0.077	0.199	1/3
5	Yes	No	Yes	Yes	-0.461**	0.231	3/0
6	Yes	No	Yes	No	-0.105	0.211	0/0
7	Yes	No	No	Yes	0.019	0.167	4/5
8	Yes	No	No	No	0.375**	0.176	2/5
9	No	Yes	Yes	Yes	-0.328**	0.137	3/13
10	No	Yes	Yes	No	0.027	0.139	7/18
11	No	Yes	No	Yes	0.152	0.169	13/3
12	No	Yes	No	No	0.507***	0.181	3/1
13	No	No	Yes	Yes	-0.031	0.188	2/5
14	No	No	Yes	No	0.325*	0.189	0/2
15	No	No	No	Yes	0.450***	0.166	8/3
16	No	No	No	No	0.805***	0.177	8/1
17	0.323	0.639	0.519	0.556	-0.376***	0.089	--

[a] Data is listed as the number of Democratic/Republican sponsored votes that meet that criteria.

* Significant at 90% level

** Significant at 95% level

*** Significant at 95% level

Table 5. Regression results on the probability of coverage

Variable	Linear prob.	Probit[a]	Logit
CONSTANT	0.068	--	-2.408***
HOUSE	-0.015	-0.030	-0.224
	(0.047)	(0.052)	(0.314)
SIGNEWSEVENT	-0.147***	-0.140***	-1.026***
	(0.029)	(0.026)	(0.235)
PASSED	0.152***	0.151***	0.939***
	(0.039)	(0.037)	(0.258)
PRESYEA	0.129***	0.135***	0.806***
	0.041	(0.043)	(0.260)
SUBMITDEM	0.201***	0.203***	1.167***
	(0.059)	(0.062)	(0.378)
DEMMAJ	0.034	0.040	0.279
	(0.053)	(0.054)	(0.335)
PRESDEM	-0.027	-0.013	-0.166
	(0.061)	(0.068)	(0.430)
SUBMITDEM * HOUSE	-0.062	-0.055	-0.319
	(0.051)	(0.050)	(0.323)
SUBMITDEM * PASSED	-0.051	-0.044	(0.246)
	(0.053)	(0.056)	(0.361)
SUBMITDEM * PRESYEA	-0.085	-0.094*	-0.606*
	(0.054)	(0.048)	(0.348)
SUBMITDEM * PRESDEM	-0.169***	-0.149***	-0.983**
	(0.061)	(0.044)	(0.412)
CONGRESSTERM 2	-0.219***	-0.179***	-1.303***
	(0.041)	(0.026)	(0.254)
CONGRESSTERM 3	-0.093**	-0.079**	-0.488**
	(0.047)	(0.035)	(0.248)
CONGRESSTERM 4	-0.189***	-0.149***	-1.106***
	(0.049)	(0.031)	(0.300)
CONGRESSTERM 5	--	--	--
	--	--	--
CONGRESSTERM 6	0.017	0.025	0.277
	(0.077)	(0.090)	(0.513)
CONGRESSTERM 7	-0.029	-0.071	-0.485
	(0.078)	(0.084)	(0.694)
CONGRESSTERM 8	-0.018	-0.017	-0.056
	(0.076)	(0.082)	(0.533)
PROXDATE = 0	0.240***	0.264***	1.418***
	(0.029)	(0.034)	(0.180)
PROXDATE = 1	0.050*	0.066**	0.361*
	-0.026	(0.032)	(0.193)
No. of observations	1197	1197	673
F-Statistic/*Chi*^{2}	*9.99***	*147.28***	*138.71***
Adjusted R^2	0.1344	0.1288	0.1285

[a] Probit coefficients are listed in dF/dX format.

* Significant at 90% level

** Significant at 95% level

*** Significant at 99% level

Table 6. Effects of party affiliation on the probability of coverage

Case	PRESDEM	PASSED	PRESYEA	HOUSE	Difference	Std. error	# of occurrences[a]
1	Yes	Yes	Yes	Yes	-0.166***	0.064	4/4
2	Yes	Yes	Yes	No	-0.104	0.066	7/1
3	Yes	Yes	No	Yes	-0.081	0.069	1/3
4	Yes	Yes	No	No	-0.019	0.066	1/3
5	Yes	No	Yes	Yes	-0.115*	0.067	3/0
6	Yes	No	Yes	No	-0.053	0.074	0/0
7	Yes	No	No	Yes	-0.030	0.057	4/5
8	Yes	No	No	No	0.032	0.061	2/5
9	No	Yes	Yes	Yes	0.003	0.049	3/13
10	No	Yes	Yes	No	0.065	0.055	7/18
11	No	Yes	No	Yes	0.088	0.058	13/3
12	No	Yes	No	No	0.150**	0.061	3/1
13	No	No	Yes	Yes	0.054	0.057	2/5
14	No	No	Yes	No	0.116*	0.068	0/2
15	No	No	No	Yes	0.139***	0.051	8/3
16	No	No	No	No	0.201***	0.059	8/1
17	0.323	0.639	0.519	0.556	0.035	0.027	--

[a] Data is listed as the number of Democratic/Republican sponsored votes that meet that criteria.

* Significant at 90% level

** Significant at 95% level

*** Significant at 95% level

Table 7. Regression results for the amount of coverage conditional on a vote being aired

Variable	OLS	TOBIT
CONSTANT	-1.180*	-1.321**
HOUSE	0.308	0.221
	(0.384)	(0.402)
SIGNEWSEVENT	-0.015	-0.039
	(0.258)	(0.284)
PASSED	1.715***	1.691***
	(0.348)	(0.426)
PRESYEA	1.465***	1.616***
	(0.478)	(0.434)
SUBMITDEM	2.582***	2.680***
	(0.613)	(0.613)
DEMMAJ	0.979**	1.046***
	(0.413)	(0.401)
PRESDEM	1.306**	1.403**
	(0.597)	(0.588)
SUBMITDEM * HOUSE	-0.813**	-0.766**
	(0.397)	(0.403)
SUBMITDEM * PASSED	-0.989*	-0.891
	(0.504)	(0.557)
SUBMITDEM * PRESYEA	-1.774***	-1.986***
	(0.568)	(0.557)
SUBMITDEM * PRESDEM	-1.457**	-1.546***
	(0.579)	(0.585)
CONGRESSTERM 2	-0.726**	-0.732**
	(0.331)	(0.299)
CONGRESSTERM 3	-0.419	-0.389
	(0.264)	(0.274)
CONGRESSTERM 4	-1.377	-1.479***
	(0.373)	(0.379)
CONGRESSTERM 5	--	--
	--	--
CONGRESSTERM 6	0.007	0.051
	(0.608)	(0.686)
CONGRESSTERM 7	1.076**	1.174
	(0.547)	(0.892)
CONGRESSTERM 8	0.379	0.448
	(0.501)	(0.625)
PROXDATE = 0	0.207	0.179
	(0.229)	(0.231)
PROXDATE = 1	0.275	0.256
	(0.222)	(0.256)
No. of observations	292	292
F-Statistic/*Chi*^{2}	4.38***	77.79***
Adjusted R^2	0.2444	0.0708

* Significant at 90% level

** Significant at 95% level

*** Significant at 99% level

Table 8. Effects of party affiliation on coverage for the conditional model

OLS estimates

Case	PRESDEM	PASSED	PRESYEA	HOUSE	Difference	Std. Error	# of occurrences[a]
1	Yes	Yes	Yes	Yes	-2.450***	0.636	6/10
2	Yes	Yes	Yes	No	-1.638***	0.614	25/0
3	Yes	Yes	No	Yes	-0.676	0.485	3/7
4	Yes	Yes	No	No	0.136	0.498	0/4
5	Yes	No	Yes	Yes	-1.461**	0.704	3/0
6	Yes	No	Yes	No	-0.649	0.592	0/0
7	Yes	No	No	Yes	0.312	0.507	2/5
8	Yes	No	No	No	1.125***	0.391	3/12
9	No	Yes	Yes	Yes	-0.994***	0.356	4/48
10	No	Yes	Yes	No	-0.181	0.413	23/49
11	No	Yes	No	Yes	0.781	0.545	32/6
12	No	Yes	No	No	1.593***	0.617	5/0
13	No	No	Yes	Yes	-0.004	0.555	3/6
14	No	No	Yes	No	0.808*	0.483	0/3
15	No	No	No	Yes	1.769***	0.639	11/0
16	No	No	No	No	2.582***	0.613	21/1
17	0.323	0.639	0.519	0.556	-0.069	0.202	--

TOBIT estimates

Case	PRESDEM	PASSED	PRESYEA	HOUSE	Difference	Std. error	# of occurrences[a]
1	Yes	Yes	Yes	Yes	-2.508***	0.602	6/10
2	Yes	Yes	Yes	No	-1.742***	0.606	25/0
3	Yes	Yes	No	Yes	-0.522	0.559	3/7
4	Yes	Yes	No	No	0.244	0.633	0/4
5	Yes	No	Yes	Yes	-1.617**	0.704	3/0
6	Yes	No	Yes	No	-0.851	0.636	0/0
7	Yes	No	No	Yes	0.368	0.528	2/5
8	Yes	No	No	No	1.135**	0.521	3/12
9	No	Yes	Yes	Yes	-0.963**	0.387	4/48
10	No	Yes	Yes	No	-1.960	0.351	23/49
11	No	Yes	No	Yes	1.023*	0.528	32/6
12	No	Yes	No	No	1.789***	0.579	5/0
13	No	No	Yes	Yes	-0.072	0.672	3/6
14	No	No	Yes	No	0.694	0.575	0/3
15	No	No	No	Yes	1.914***	0.644	11/0
16	No	No	No	No	2.680***	0.613	21/1
17	0.323	0.639	0.519	0.556	-0.027	0.205	--

[a] Data is listed as the number of Democratic/Republican sponsored votes that meet that criteria.

* Significant at 90% level

** Significant at 95% level

*** Significant at 95% level

CONCLUSION

This study found that through the use of a sound statistical method, a better model of the network news process could be developed. Results show that network coverage of Democrats and Republicans in Congress is significantly different at some times and not at others. The effect and significance of the differences vary with changes in the structure of American government. The results also suggest that the networks are not biased in their decision of whether to cover legislative votes and that any bias enters through the decision of how much airtime to give each vote.

These findings do not prove or disprove the existence of a consistently biased nightly news broadcast. No liberal or conservative argument can be made because the differences suggested here could be caused by any of several contradicting scenarios. The results could be an example of the bipartisan and objective media celebrating the way things should always be in a government constantly bickering over partisan agendas. They could be a result of the corporate controlled, conservatively biased networks applauding the conversion of a liberal politician. Or, they could occur because the liberal media is publicizing that the good guys can win even when the world seems to be against them. This study, like most others, does not have the power to distinguish between those possibilities. It can only provide a basis for showing that there are sometimes differences in coverage based solely on political party. This is important in determining whether the networks are objective and when viewers need to consider this as they inform themselves by watching the nightly news.

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BIOGRAPHICAL SKETCH

Colin Knapp was born and raised in St. Petersburg, Florida. He attended Ohio University where he graduated summa cum laude in 1996. In addition to earning Bachelor of Business Administration degrees in Business Economics and Finance, Colin also completed the Air Force Reserve Officer Training Corp Program and was commissioned as a second lieutenant upon graduation. While serving in various financial management assignments over the last six years, he has been promoted twice and risen to his current rank of captain. In October 2000, he was competitively selected to return to graduate school in preparation for his next assignment as an Instructor of Economics at the United States Air Force Academy in Colorado Springs, Colorado.